

Wright State University

CORE Scholar

---

Master of Humanities Capstone Projects

Master of Humanities Program

---

2017

## Object Based Workshops at the University of Pennsylvania Museum of Archaeology and Anthropology

Katherine Margaret Peden

*Wright State University - Main Campus*

Follow this and additional works at: <https://corescholar.libraries.wright.edu/humanities>



Part of the [Arts and Humanities Commons](#)

---

### Repository Citation

Peden, K. M. (2017). Object Based Workshops at the University of Pennsylvania Museum of Archaeology and Anthropology. .

<https://corescholar.libraries.wright.edu/humanities/18>

This Thesis is brought to you for free and open access by the Master of Humanities Program at CORE Scholar. It has been accepted for inclusion in Master of Humanities Capstone Projects by an authorized administrator of CORE Scholar. For more information, please contact [library-corescholar@wright.edu](mailto:library-corescholar@wright.edu).

Wright State University

# Object Based Workshops at the University of Pennsylvania Museum of Archaeology and Anthropology

Katherine Margaret Peden

The University of Pennsylvania Museum of Archaeology and Anthropology is a world-renowned institution, located on the campus of the University of Pennsylvania. The museum was founded in 1887, under the university's Provost Dr. William Pepper. Dr. Pepper convinced the university's board of trustees to create a building to house the university's artifacts, especially those from the impending archaeological expedition to the ancient site of Nippur. Staff would no longer shuffle the artifacts between the library and different buildings, but keep the artifacts in their own separate home, the museum. The Penn Museum is the largest university museum in the country, with nearly a million artifacts from around the world. The Penn Museum is unique because its staff, in conjunction with the university, archaeologically excavated or ethnographically collected a large percentage of the artifacts. Professionals from the museum and the university were the first from an American institution to conduct archaeological fieldwork in some parts of the world. Staff worked to make the Penn Museum the first American institution to quit accepting illegal antiquities, and were leaders in bringing attention to the illegal trading market.

Over the summer, I completed an internship at the University of Pennsylvania Museum of Archaeology and Anthropology in Philadelphia, Pennsylvania. The internship program included my project, employee-guided tours through the galleries and storage collections, fieldtrips and guided tours of other Philadelphia museums, and a lecture series from every department. I worked 282 hours over June, July, and the first week of August. This opportunity provided not only an educational work experience, but it reinforced my dream to work in a museum.

Drawing on recent museum theory, this project explores how best to utilize the education collection at the Penn Museum to create stimulating, interactive workshops that will educate not

only Penn students but also residents and visitors of Philadelphia. I created two, hour-long, Object Based Learning workshops, about body modification and survival and technology. Graduate students will facilitate these workshops, and these programs will be open to everyone, the university and the general public. As a team, I worked with the museum's Group Sales Manager, Amanda Grady, and with Dr. Anne Tiballi, in the Academic Engagement department. We worked closely with Allyson, a museum educator and caretaker of the education collection. I arranged all the research and information that the graduate students may present during the workshops, created PowerPoints with pictures to show during the workshops, compiled a spreadsheet of the objects to use and rotate, made a brochure of my workshops, and put together marketing research. The guests will come to learn about the topics, while being able to touch and have a hands-on experience with the related artifacts.

This project discusses the process and importance of developing workshops that specifically incorporate educational theories like Object Based Learning (OBL), which was the driving force behind the programs I created. OBL is one of many important learning theories a museum's educators can apply when creating educational programming, and in doing so, maximize the educational benefits of those programs. The educators' desire to design workshops that utilize OBL is a testament to their duty to fulfill the Penn Museum's ongoing mission of teaching, education, and public engagement.

Museum education is a growing field and more museums are creating separate education departments within their institutions, or evolving present departments to think more critically about education. All employees of a museum need to work together, and the importance of interdepartmental cooperation cannot be stressed enough. However, a museum's educators are critical to the success of any programming. There are many 'jobs' in a museum: conservators

have the scientific knowledge to physically treat the artifacts, a registrar manages the records and museum's database, a curator cares for and conducts the research on the collections. All of these people may, and should be, consulted when creating any exhibition or programming, but it is the job of the educator to see that any product is ready for an audience. "Museum education is understood in the broadest sense as any museum activity pursued with a view of facilitating knowledge or experiences for public audiences."<sup>1</sup> It is up to the educator, who understands the learning process and educational theories, to create programming that maximizes educational value for a museum's audience. Curators, for example, have all the academic training and knowledge of a topic, but that might not translate well to a general audience. Museum educators are the medium between a museum and its audience. The importance of interdepartment cooperation was key in the creation of these workshops. Amanda was able to help us target audiences and think about how to market these workshops, but it was educators like Anne, who has experience with projects and academic engagement, and Allyson, who knows the education collection and makes educational lesson plans, who helped us develop these workshops.

Studying the learning process is difficult, but necessary to think about when developing educational programming. Understanding how people learn and their requirements to have a profitable educational experience has proven to be of great help in designing museum exhibits, or in this case, workshops.<sup>2</sup> Learning is both a product and a process.<sup>3</sup> The process of learning is optimized when a lesson is more engaging. This happens when a lesson or program involves multiple senses and when the audience leads their own experience, with an encouraging

---

<sup>1</sup> Melissa Bingmann, Nancy Cutler, Tim Grove, Kimberly A. Huber and Anna Johnson, *The Museum Educator's Manual Educators Share Successful Techniques* (Lanham: AltaMira Press, 2009), 8.

<sup>2</sup> David Dean, *Museum Exhibition Theory and Practice* (New York: Routledge, 1994), 19.

<sup>3</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums: Visitor Experiences and the Making of Meaning* (Lanham: AltaMira Press, 2000), 9.

instructor to facilitate. The audience is more likely to remember and find meaning in such a program. According to neuroscientist Gerald Edelman, the learning process is a whole-body experience, involving the emotions and senses, the physical as well as the mental.<sup>4</sup> When an activity positively captures the interests of a person who is emotionally invested, the person will learn and retain the memory of what he learned.<sup>5</sup> Programming that triggers someone's memories is more meaningful.

Learning is the process and product of a complex series of electrochemical interactions in the brain and body, mediated in the part of the brain known as the limbic system. The limbic system serves many functions, including regulating emotions, storing geographical memory, responding to the needs of bodily functions, and it is the focal point for regulating all memory.<sup>6</sup> Before the brain can begin to process information and learning can occur, information must enter the brain, and the limbic system serves as a filter system. People perceive information via the body's senses; touching, hearing, smelling, tasting, and seeing. More information enters the brain than a person realizes, and the limbic system will decide what is worth remembering. The brain saves information because it has some meaning and personal relevance for us, is important to our internal physical state at that time, or is important to what we already know and feel. Therefore, if we are hungry, for example, we cannot focus as precisely. At that time, the body and brain focus on the body's state of hunger, not on learning or perceiving other material. A workshop, or any activity, aimed at a complementary employment of both sides of the brain, right side appeal and left side cognition, is more educationally beneficial.<sup>7</sup> While the right side

---

<sup>4</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums*, 24.

<sup>5</sup> Alice Kolb and David Kolb, "Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education," *Academy of Management Learning & Education* 4, no. 2 (2005): 208.

<sup>6</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums*, 17.

<sup>7</sup> David Dean, *Museum Exhibition Theory and Practice*, 30.

of the brain, often called the creative side, responds to touching and hearing, the left logical side controls rational reasoning and is central to learning.

After years of refinement, John Falk and Lynn Dierking created what they believed to be an appropriate framework in which to think about learning, their Contextual Model of Learning. Learning is an organic, integrated experience, situated within personal, physical, and sociocultural contexts, and is affected by time.<sup>8</sup> A person's personal context, the surrounding physical environment, and any sociocultural influences affect learning. When a museum's educators consider these three contexts, and how they affect a person's learning, the educators can create learning programs that are the most effective for their audience.

The personal context of the Contextual Model of Learning states four lessons: learning flows from appropriate emotional cues and motivation; people's interests facilitate learning; 'new' knowledge is built on a foundation of previous knowledge and experience; and learning is expressed within appropriate contexts.<sup>9</sup> This is most obviously demonstrated by the fact that people have different interests and motivations. People take a keen interest in topics they like. Intrinsically motivated learning, meaning people learn by choice and without outside motivation, like studying to pass a test, is more effective. When people choose to learn they are less likely to feel self-conscious or pressured, and the process will seem more positive.

The sociocultural context defines both who we perceive ourselves to be and how we perceive the world and culture that we inhabit.<sup>10</sup> People are influenced by the shared practices, beliefs, and customs of the world they grow up in. Therefore, someone's sociocultural context shapes his personal context. Learning is both personal and social, and people learn the thoughts

---

<sup>8</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums*, 10.

<sup>9</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums*, 16.

<sup>10</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums*, 39.

and behaviors of those around them, like parents or friends.<sup>11</sup> The Group Sales manager at the Penn Museum will offer these workshops to groups because people benefit from education in social situations. Since everyone is coming into the group with different experiences, people can learn from one another, and think about the topics from different perspectives.

The physical context constitutes one's surroundings, and defines how a physical environment can influence a person's behavior. Physical spaces carry meaning and people usually alter their behavior according to where they are, for example, you lower your voice in a library.<sup>12</sup> Behavior settings teach people to associate museums as educational institutions, free choice institutions, where opportunities for positive and intrinsically motivated learning take place.<sup>13</sup> Some traditional settings, like a classroom with only lecture based teaching, lack trans-discipline activities and contradict the real world in which students need to be collaborative, creative, and use problem solving skills.<sup>14</sup> Museums, as non-formal institutions, contain a physical environment that is not dissimilar to our lives, therefore have the potential to give students what they need to connect with their own interests, provide interactive spaces for learning, and encourage in-depth exploration.<sup>15</sup>

It is impossible to select a perfect theme, and design a workshop that is perfect for everyone. According to the Contextual Model of Learning, no person that enters a museum is the same; people have different interests, values, come from different circumstances, and have their own unique prior knowledge. What happens when someone leaves the museum will also affect the retention rate of what a person just learned. These are all factors museum employees

---

<sup>11</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums*, 41.

<sup>12</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums*, 18-20, 55.

<sup>13</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums*, 54-55.

<sup>14</sup> Jorma Enkenberg and Henrikka Vartiainen, "Learning from and with museum objects: design perspectives, environment, and emerging learning systems," *Educational Communications and Technology* (2013): 842.

<sup>15</sup> Jorma Enkenberg and Henrikka Vartiainen, "Learning from and with museum objects," 842.



have no control over. However, museum educators can take steps to optimize the educational benefits of their programming, and research ideas and topics that are most likely to attract an audience.

Museums are free choice destinations, meaning people choose to spend their leisure time at a museum. Understanding what factors influence people in their decision on how to spend their leisure time, can teach museum staff how to market their institution to attract an audience. Marilyn Hood lists six criteria that adults consider in deciding how to spend their time: belonging with people and social interaction, doing something worthwhile, having the challenge of new experiences, having an opportunity to learn, participating actively, and feeling comfortable and at ease in one's surroundings.<sup>16</sup> If educators can create programming and staff can market their museum as fulfilling these factors, they will attract a large audience.

Before creating these new Object Based Learning workshops, it was important to explore what programming other museums offer, and what the Penn Museum has offered in the past. In researching this information, the team learned what activities might possibly be successful or not, and learned about opportunities that attract guests to other museums. Larger museums, like the Metropolitan Museum of Art or the British Museum, have several comparable activities to what the Penn Museum already offers. The Met has numerous programs for families and children including gallery tours, interactive arts and crafts, and story time. It also offers educational talks, educational programming, and internships for students and adults. The British Museum offers guided tours, tours behind the scenes, and lectures on various topics. It also offers a multitude of services for teachers to prepare their classes for a visit to the museum, with educational material for pre- and post-visit lessons, or lesson plans and sample activities for

---

<sup>16</sup>David Dean, *Museum Exhibition Theory and Practice*, 24.

those who cannot make the visit. Educational programming at the British Museum allows students to handle replica items, incorporated into a themed lesson.

Children and family museums have excelled in intergenerational programming, especially in the development of hands-on interactive exhibits.<sup>17</sup> The Boonshoft Museum of Discovery in Dayton is a family museum. It offers many opportunities for children to touch and learn, including sessions throughout the day when staff bring out touchable objects and teach a lesson. Once a month, for Super Science Saturday, the staff host educational hands-on activities related to a set theme. The Please Touch Museum located in Philadelphia is another children's museum. Children learn and discover through play and touch. The museum has interactive exhibits like a doctor's office, restaurant, construction zone, and children learn while they play those roles. For babies and children, one of the most important ways to learn is through touch. They will grasp and play with anything, and that is how they learn about their environment. Learning by touch is encouraged, and should continue after childhood.

Hands-on activities and learning with objects is also available at secondary levels of education, universities. Students in areas of study such as museology, anthropology, and art regularly have lessons with objects. Certainly, fields that involve material culture lend themselves better to lessons with object incorporation than others, like math. Another university museum, the University of Denver Museum of Anthropology (DUMA) provides classes for both graduates and undergraduates that allow for hands-on experiences with its collections.<sup>18</sup> Students at Denver regularly use the museum's collection to learn how to conduct object research and interpret material culture for exhibitions and public programming.

---

<sup>17</sup>Melissa Bingmann, Nancy Cutler, Tim Grove, Kimberly A. Huber and Anna Johnson, *The Museum Educator's Manual*, 76.

<sup>18</sup> Christina Kreps, "University Museums as Laboratories for Experiential Learning and Engaged Practice," *Museum Anthropology* 38, no. 2 (2015): 98.

The Penn Museum, at the University of Pennsylvania, offers numerous programs. The Academic Engagement department, and my supervisor Dr. Anne Tiballi, work with the university's students and faculty. The department's job is to encourage more teachers and students to come to the museum, and take advantage of the collections. Through the Academic Engagement department, students can participate in curatorial seminars, summer field schools, fellowships, make workshops, and exhibition or yearlong internships. The department allows the faculty to host their classes in the museum so that students can study the objects hands-on. The summer internship program, which I participated in, is the only program that is open to non-Penn students. The Penn Museum is a university museum; its purpose is to support the students and faculty at the university in research and education.

Besides touching, observation and imitation is a proven learning technique.<sup>19</sup> From children to apprentices, learning by watching then doing is arguably better than formal lecture based teaching.<sup>20</sup> The importance of a hands-on craft, or recreating an object, is understated. Dr. Anne Tiballi discusses in her chapter in *Engaging with the Senses* the benefits students gained after they attempted to recreate objects. For a class about prehistoric Andean culture, the students discussed weaving techniques and textiles from the Penn Museum's collection, and then attempted to recreate similar textiles by weaving on a loom. What Tiballi's study shows, is that students who attempt to recreate an object, had a better understanding of the materials, and an emotional and mental connection to the people who created those objects.<sup>21</sup> Having made textiles for themselves, the students had an appreciation for the efforts and labor it would take to

---

<sup>19</sup>John H. Falk and Lynn D. Dierking, *Learning from Museums*, 49.

<sup>20</sup> Helen J. Chatterjee and Leonie Hannan, *Engaging the Senses: Object-Based Learning in Higher Education* (New York: Routledge, 2016), 65.

<sup>21</sup> Helen J. Chatterjee and Leonie Hannan, *Engaging the Senses*, 75-96.

do the work. The Academic Engagement department offers programs and classes like this to help the university utilize the museum's collections.

The team considered if a hands-on craft for these workshops would be appropriate. For the survival and technology workshop, we discussed the possibility of making candles or having the audience attempt to weave on a loom. Trying to make a candle or having to use a loom to weave textiles would give people an appreciation for the work needed to do these jobs. These ideas would take more time, and money for the materials needed. For now, the prospect of adding a craft to these workshops is an idea to consider for the future.

The Public Programs department presents a variety of opportunities for the community. Over the summer, the Penn Museum hosts a concert series called Summer Nights. Every Wednesday, guests enjoy local music and walk through the galleries during extended hours. This is great for the visitors who would not have been able to come during normal business hours. The museum celebrates the holidays of numerous cultures and religions in its World Culture Series, encouraging public awareness of world heritage. The museum offers both family friendly and adult activities. The Public Programs department hosts the 40 Winks program. Children stay over-night in the museum and participate in several activities, like trivia and tours in the dark. Over the Fourth of July holiday, the museum held a WAWA Welcomes America celebration. For that day, admission was free, and staff and volunteers had tabletop activities throughout the museum. Programs for adults include guided tours and lectures. In the very popular Mummies and Martinis events, adults can sip cocktails and tour the galleries. There are "make" workshops, in which groups make and learn about objects like spears and weapons, jewelry, or Maya hot coco. There is also a cuneiform workshop, in which groups can study cuneiform tablets and attempt to make their own with clay and styluses.

The Learning Programs department creates educational programming for K-12 students and home-schooled children, in the community. The department makes a point to study local curriculum, so that they can tailor any program, whether an activity or a tour, to match and enhance what the students are learning. Students learn more efficiently when museum activities are interdisciplinary and closely related to what they are studying in school.<sup>22</sup> The Learning Programs department has created workshops like Digging up Rome, for students to learn about ancient history and archaeology, and Preserving the Past, to learn about the work of museums and conservation. Not every school can visit the museum, so the department created programs schools can check out. The Artifact Loan Boxes come prepared with a thorough lesson plan with information, vocabulary, activities, and the artifacts to go with it. The museum's educators have found those activities that use objects are the most popular. Teachers love being able to strengthen their lessons by incorporating artifacts and the students have fun handling the objects. Opportunities other museums offer, and the programs the Penn Museum already offers were the inspiration for these new Object Based Learning workshops that will be open to the public.

Object Based Learning is a mode of education that involves the active integration of objects into the learning environment; objects aid in the acquisition and dissemination of subject-specific and cross-disciplinary knowledge, and observational, practical and transferable skills.<sup>23</sup> Haptics is the process of using touch, tactile sensation, to explore and gain information about the world. OBL is important because it allows people to listen, see, and touch. Touching helps people form lasting memories of the subject and it helps people make connections between the subject and their own experiences.

---

<sup>22</sup>John H. Falk and Lynn D. Dierking, *Learning from Museums*, 59.

<sup>23</sup>Helen J. Chatterjee and Leonie Hannan, *Engaging the Senses*, 1.

Everyone benefits from different teaching approaches and learning styles. Some people are audio stimulated, they learn best by listening, and respond well to traditional lectures. While others learn best by actively participating. Many theorists have defined specific types of learning styles, using the Learning Style Inventory, but it is important not to confine a person into a single and concrete style.

“When it is used in the simple, straightforward, and open way intended, the LSI usually provides an interesting self-examination and discussion that recognizes the uniqueness, complexity and variability in individual approaches to learning. The danger lies in the reification of learning styles into fixed traits, such that learning styles become stereotypes used to pigeonhole individuals and their behavior.”<sup>24</sup>

Teachers and museum educators should be facilitators of a multi-sensory experience, in which people can learn in whichever style they prefer.

People are more likely to retain something learned through whole-sensory experiences<sup>25</sup>, or multi-sensory experiences,<sup>26</sup> than something learned through engaging a single sense. The more senses (those being touch, sight, hear, taste, smell) that people use during the learning process, the more beneficial that lesson is. People remember, stay focused during the lesson, and make personal connections or recall any relatable or pertinent ideas to that lesson. The combination of the tangible objects and the intangible cultural information, stories or experiences, is the key for stimulating dialogue and interaction.<sup>27</sup> In these workshops, the

---

<sup>24</sup> Alice Kolb and David Kolb, “Learning Styles and Learning Spaces,” 198.

<sup>25</sup> David Dean, *Museum Exhibition Theory and Practice*, 27.

<sup>26</sup> Ladan Shams and Aaron Seitz, “Benefits of multisensory learning,” *Trends in Cognitive Sciences* 3, no. 1 (2008): 4.

<sup>27</sup> Christina Kreps, “University Museums as Laboratories for Experiential Learning and Engaged Practice,” 106.

audience can listen to the facilitator present information, there will be several pictures to look at, and the audience will have multiple objects to touch and examine.

Ladan Shams and Aaron Seitz, from the psychology departments at the University of California campuses, postulate that our brains have evolved to learn and operate more optimally in a multi-sensory environment.<sup>28</sup> Concerning memory recognition, when a person engages multiple senses, more sections of the brain are used, thus it is more likely a person can retain and recall those memories.<sup>29</sup> At all ages, people benefit from a multi-sensory experience. Successful learning should include ‘thinking’, a mental process, and ‘doing’, a physical process.<sup>30</sup> Active participation is an important part of any educational experience.

David Kolb’s theory, published in 1984, combines the works of John Dewey and Jean Piaget, and culminates in his Experiential Learning Model (ELM). Experiential learning is learning through the process of experiencing, learning by active involvement and then reflecting upon that experience.<sup>31</sup> Kolb’s Experiential Learning Model cycle has four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation.<sup>32</sup> When people actively learn, active learning including any physical participation or hands-on activities, they can reflect and theorize about their experience, then add new knowledge to the brain. This learning process differs greatly from traditional learning methods like lecturing or reading because in experiential learning, the person is actively engaged in participating and experiencing an activity. The best example of this process is learning to ride a bike. A person is

---

<sup>28</sup> Ladan Shams and Aaron Seitz, “Benefits of multisensory learning,” 1.

<sup>29</sup> Ladan Shams and Aaron Seitz, “Benefits of multisensory learning,” 4.

<sup>30</sup> Chatterjee and Hannan, *Engaging the Senses*, 3.

<sup>31</sup> Helen J. Chatterjee and Leonie Hannan, *Engaging the Senses*, 2. Alice Kolb and David Kolb, “Learning Styles and Learning Spaces,” 194-195.

<sup>32</sup> Helen J. Chatterjee and Leonie Hannan, *Engaging the Senses*, 2.

not going to learn to ride a bike by reading about it, or hearing someone talk about it: he will learn by trying to ride.

While Object Based Learning opportunities are prevalent in many museums and educational institutions, there are reasons some places cannot offer hands-on programming. A museum might not have artifacts that are safe to handle, or lack a budget to get objects that staff could use in these programs. Ample space is also required to host workshops or activities, and smaller museums might not have extra rooms or a secure environment to conduct such programming. Luckily, the Penn Museum has large, open classrooms with access to computers, and materials needed to handle objects safely. Understaffing can be an issue as well. A museum might not have enough staff to conduct any sort of educational programming, or staff do not have time to leave their duties to host activities. The Penn Museum has several departments dedicated solely to audience engagement. Educational institutions that do not offer object-incorporated lessons face the same issues. Universities might not have access to objects, or museums with whom they can collaborate with to provide object based educational opportunities. Schools might not have money to take class trips to museums for programming.

The first step in creating these workshops was to develop their themes. There were important factors to consider when deciding what the topics of the programs would be: what objects were available, who the audience for these workshops would be, and what topics they would enjoy.

The objects that the facilitators will use in these workshops come from the museum's education collection. The education collection comprises the artifacts in a museum that educators and other staff use in programming, objects people can touch and handle. The Penn Museum has hundreds of educational artifacts, which is a large number compared to most



museums. They are replicas, orphaned objects (artifacts that do not have a recognizable history), or modern purchases. These items are safe, and these are the objects appropriate for object based programming. They are not thousand years old vases, but are still invaluable and precious. All museums should have an educational collection, and expand the opportunities they have which utilize those artifacts. The Penn Museum is a university museum, so employing its collection for educational purposes is one of its main tenants.

The staff divide the education collection by cultural region. It features objects from Egypt, the Americas, Asia, Africa, the Near East, the Classical Mediterranean, and Oceania. The collection contains a wide variety of objects like weapons, clothing, jewelry, tools, household goods, and pottery items. As a team, we wanted topics that would allow for objects from many of those regions, so that the workshops would be cross-cultural. We similarly wanted to use objects that educators do not use often in other programs. With such a large collection, and with the help of Allyson who oversees the education collection, I had many objects to choose from to use in the workshops.

These workshops are unique because they focus on touching and incorporating the artifacts into the lesson, the definition of Object Based Learning. I considered what artifacts a facilitator could successfully use in programming, and then formed a lesson plan around them. For example, the collection has many jewelry pieces, so I proposed a future jewelry workshop, so that the public can see and engage with those items. The priority was using objects first, and then building a lesson around them. An important rule in museums is do not touch the artifacts, but in these workshops, the audience can.

People can better appreciate artifacts when they can touch and experience those objects. Scholars and members of originating communities have critically examined how the functions,

meanings, and values of objects change when people reframe them within the paradigms of Western museums.<sup>33</sup> Artifacts lose their worth when people take them out of their original context and simply put the objects in a case. When people can physically handle an artifact, not just look at it in a case, they feel more connected to and engaged with the object.<sup>34</sup> At least in handling audiences can begin to contemplate an artifact's true purpose and objective. During the survival and technology workshop, the audience will consider how the objects, like looms and a Chinese compass help the people who use them. The compass is an interesting artifact. While a compass indicates direction, this Chinese compass is more complicated. People use it to orient their lives and it reveals when people should perform tasks such as harvesting. These workshops are important because they will help audiences understand these artifacts in their original cultural contexts.

Object Based Learning has its pros and cons, each of which museum staff should consider when contemplating incorporating object based programming. One obvious drawback of touching artifacts is that it can be harmful for the object and people. People can easily, although unintentionally, damage the artifact during handling. Without proper training, it is possible for someone to drop an object, or accidentally knock an object off a table. The oils on a person's skin can damage an object's surface, or cause the object to become dirty. An artifact can also be harmful to a person. Before museums began to standardize their conservation practices, people would often treat artifacts with dangerous chemicals. For example, curators often used arsenic, which is very harmful for people to touch without gloves. Museums must weigh the obligation to meet their audience's desire to learn and touch against their

---

<sup>33</sup> Christina Kreps, "University Museums as Laboratories for Experiential Learning and Engaged Practice," 99-100.

<sup>34</sup> Christina Kreps, "University Museums as Laboratories for Experiential Learning and Engaged Practice," 102.

responsibility to care for their collections, which creates a contradictory nature.<sup>35</sup> However, educators can solve these problems by using safe objects, those being the artifacts in a museum's education collection.

Preservation of artifacts should be a museum's goal. However, being a university museum, a research museum, it is a priority of the Penn Museum to be able to use its collections for learning, and to gain as much knowledge as possible. Conservators at the museum believe that, "we can't stop deterioration, only slow it down," so it is important to be able to use the collections safely while the museum has them. I did choose alternative objects, so facilitators can rotate out and substitute different objects, so they would not get overused.

Next, I had to consider who the audience for these workshops would be. One reason these workshops are so important is that they will be open to the general public. The Academic Engagement and Learning Programs departments offer university faculty and students, and local K-12 students a variety of programs, including those that involve hands-on experience with artifacts. That leaves out the adult public, which is a large audience. Besides the few opportunities provided by the Public Programs department, there are a comparatively small number of hands-on object experiences for adults. We created these workshops in order to expand the list of object based opportunities the Penn Museum will offer to the public.

The Penn Museum has a variety of opportunities and services for guests with accessibility needs, to ensure all visitors have a great time. Museums are becoming more conscious and creating programs that are appropriate for a variety of needs. The Penn Museum is particularly great in this respect, and has a full-time staff member trained in accessibility concerns. The programs that she has created engage various senses, such as touching or

---

<sup>35</sup> David Dean, *Museum Exhibition Theory and Practice*, 26.

listening, that have proven more effective for people. For example, some experiences are heavily tactile for people with vision concerns. She is also cognizant of people who are sensory sensitive, and created programs that avoid an overload. It was important to think about what alterations facilitators could make to these workshops, to make them more accessibility friendly for a wider audience.

As a team, we discussed what topics and themes would be interesting and popular to our audience. My supervisors suggested multiple ideas to consider when narrowing down topics for these workshops. The education collection has many objects from Oceania, but the museum has nothing on display. We wanted to make sure whatever our themes were, we wanted to use items from regions that are underrepresented within the museum. I spent a few days walking through the galleries just to see what visitors spent most of their time looking at. I also read online reviews, like Trip Advisor and the museum's social media pages, to see what guests had to say about the museum and what they enjoyed. The two Egyptian galleries seemed to be the most popular, where visitors spent the most time, and online reviews made comments about the mummies and sphinx more than other items. We considered workshops that would complement, or go into further details about popular topics that are on display. I then began to write up research on several different possible themes including adornment, money and forms of exchange, writing around the world, music and dance, and games and sports.

The team ultimately decided on two themes, body modification practices from around the world and survival and technology. Some topics lend themselves better to hands-on activities, and we had to select topics that facilitators would have numerous objects to use. Per the Contextual Model of Learning, there is no perfect topic that would interest everyone. We decided that general themes, which are relatable and have various points to discuss, are the most

likely to attract a wide audience. Seeing tangible examples of previously learned verbal or pictorial material is crucial in facilitating long-term learning.<sup>36</sup> Everyone knows about body modification, and can share their experiences or opinions about it. After this workshop, ideally, the audience will walk away with new opinions and a new understanding of other cultures and their modification practices. Learning is the process of building upon one's prior knowledge with additional information and positive experiences, so people can then re-examine and modify their knowledge. This is why the team chose survival and technology. All people can relate to the need for clothing and shelter, or the importance of writing and methods of transportation.

The body modification workshop is about various tattooing, piercing, and scarification practices around the world, and Chinese foot binding. This theme is important because it introduces to the public cultural practices among other people. The audience will learn that we all, as humans, have the desire to modify our bodies. While nearly every culture practices some form of modification, and some practices have been around for thousands of years, for some people body modification is still taboo. This workshop aims to discuss the history of these practices, and explain to audiences why people choose to modify their body. The details and methods may differ from culture to culture, but the significance and desire to modify is entirely human.

While discussing these practices, the audience will be able to touch and interact with several artifacts. For scarification, there are two objects for the facilitator to use. One is a carved statue from the Baule culture of Côte d'Ivoire (Ivory Coast) in Africa. The Baule culture is famous for its art, which includes hand carved wooden masks and statues. For the Baule, scarification represents beauty, culture, and socialization, compared to the ugly, naked,

---

<sup>36</sup> John H. Falk and Lynn D. Dierking, *Learning from Museums*, 27.

unmarked bodies of others. The statue has scars on its stomach and face. The other object is an unpainted and carved wooden facemask, in the style of a Kepele Mask. The lines on the face represent facial scars people would get. These are excellent objects to use because they were hand made, and the crafters chose to add the scarification, because the practice is important to them. For Chinese foot binding, the education collection has two pairs of lotus shoes. These are important to use in the workshop because they are very dramatic for people to see. While these workshops will include several pictures, to hold the tiny shoes in one's hand, deepens the experience. There is also a model of what a bound foot would look like. There are multiple pieces of piercing jewelry that the facilitator can use. While the facilitator will discuss multiple types of body piercings, the objects are all for ear piercings. There are several ear spools or gauges, from the North American, and metal earrings from Egypt. For tattooing, there are stamps that depict designs of traditional Oceania art. With so many objects, the facilitator will have a diverse range of objects to incorporate in the workshop.

The survival and technology workshop is about various needs we have as humans, or problems we have had to overcome, and how we invented and used technology to meet those needs. The facilitator will discuss clothing, shelter, lighting, transportation methods, writing, and tools/weapons, three issues per workshop. This is in the interest of time, because discussing everything in an hour would be impossible. In addition, this would encourage people to come back, to hear about the other topics and artifacts. The team considered the possibility of letting people choose from the entire list of topics, which they would want to do. The chance for students, in this case the audience of our workshops, to take control of their learning, will enhance their ability to learn.<sup>37</sup> This creates the opportunity of bringing people back, and giving

---

<sup>37</sup>Alice Kolb and David Kolb, "Learning Styles and Learning Spaces," 209.

them the chance to tailor the workshop to what they want, increasing the chance they will enjoy the program.

The education collection includes many artifacts the facilitator could use in this workshop. For the topic of clothing, there are multiple looms. These are important objects to use in the discussion of textile production, before people had modern technology like sewing machines. Numerous cultures around the world use looms. A model of the silk worm's life stages is another interesting piece. Silk production was crucial in Asia, and is a huge trade commodity. To discuss the issue of illumination, there are replica oil lamps from the Classical period. In past programs, staff have found visitors often do not know what those pieces are. Facilitators have multiple models of canoes to choose from for the topic of transportation. This is a large topic; the need for a variety of transportation methods, using canoes can focus the discussion on water transportation. Shelter is also a large topic, and the education collection has great model teepees. For this topic, the facilitator can discuss teepees, and the variety of different natural materials people use to construct shelters. For writing, there are replica cuneiform tablets and other writing samples. The education collection features many tools made from a variety of materials. Any of these objects would aid the facilitator's discussion of human ingenuity and invention.

While the team hopes that these topics will interest and attract a wide audience, there were specific groups that the Group Sales Manager sought to contact. There are multiple ways to advertise these workshops, so that they will appeal to as many people as possible. For example, senior groups might enjoy the survival and technology workshop, because throughout their lives, they have seen many technological changes. At the end of this workshop, the group could discuss the prospect of losing technology, and question if people could manage without

technology. The facilitator could pose questions about surviving without electricity, can people make candles or cook without appliances, could people make their own clothes if there were no stores, etc. Scouting groups or survivalists/preppers, which there are many of in Philadelphia, would be interested on this focus.

Amanda, the Group Sales Manager, is responsible for bringing in adult groups, and marketing these new workshops. By growing group visitation, the museum can thoughtfully engage diverse audiences and ensure that visitors of various cultural backgrounds, age, and geographic location have the opportunity to visit the collections.<sup>38</sup> Visitors who come through this department include senior groups, corporate/business groups, non-Penn college groups, other adult interest groups, and tour operators. Amanda works with numerous senior citizen communities to bring in large groups to the museum. This gives seniors a chance to learn and visit the museum, and stay active. Amanda also handles many corporate events. Company heads who want to offer an activity for their employees will come to the museum for a visit and tour. Before this department became full time, it was part of another, which had other obligations to focus on. Since then, group sales revenue, from fiscal year 2015 to 2016, have increased from \$39,713 to \$46,019, due to an increase in the programming that groups are taking advantage of and booking.<sup>39</sup> Senior group visits, from fiscal year 2015 to 2016, have more than doubled. In 2015, seven groups visited, and in 2016, 23 groups visited, booking multiple tours and programs.<sup>40</sup> The Group Sales department is successfully attracting people into the museum, and these new workshops are a way to expand the museum's offerings to these adult groups, to ensure that the revenue continues to increase.

---

<sup>38</sup> "Group Sales Strategic Plan," The University of Pennsylvania Museum of Archaeology and Anthropology, 2017, 3.

<sup>39</sup> "Group Sales Strategic Plan," 6.

<sup>40</sup> "Group Sales Strategic Plan," 7.



Another aspect of the Group Sales Manager's job is to work with tour groups.

Philadelphia is a large city, people come from all over the world and the Penn Museum is just one of many attractions. For example, the Philadelphia Convention Center host hundreds of popular events every year. While people are in the city for a convention, they have a plethora of other attractions to choose from, to occupy their free time. The manager's job is to sell the museum, and work with tourism companies or the convention center, who can connect their clients with the Penn Museum. There will be a tattoo convention in February of 2018, and this would be a great audience to advertise the new body modification workshop to.

Once the team decided on the topics and what objects to use in each workshop, I began to conduct research and put together the information for the facilitators to present. This step was very important. People trust absolutely in the reliability and accuracy of the information a museum presents, as it is an institution of learning and education. It is imperative for museums to adhere to strict policies about what they publish; information must be correct and factual. When putting together the information on these topics, I used credible sources. Being at a university museum, I had a fantastic academic library at my disposal. I used academically published books for the information. For the body modification workshop, I tried to find sources that spoke directly about a culture and its practices. I found a National Geographic video about scarification practices in New Guinea. In the video, researchers had filmed a scarification ceremony, and interviewed men in the process of getting their scars. These were the types of primary sources I wanted, hearing directly from the people about why they modify their body. People can effectively organize information they learn that was recounted to them in a narrative,

which made it important for me to find sources that shared the stories and information, directly from the people.<sup>41</sup>

There were multiple factors to consider when planning the course of the workshops; total time, how many objects to use, and how much time to spend discussing each object. A good workshop needs sufficient time to examine each object and topic, but not too much time that people begin to get bored or lose focus. As a team, we contemplated how much information we wanted to include. We intend these workshops to be informative and educational, but also fun. We did not want the facilitator to bog down the participants with an overload of facts and information; we did not want the workshops to feel like a lecture or a class. We had to think about who would come to these programs, and thus what information they might already have about the topic. It is a safe bet to assume that adult audiences have general knowledge, but not much about specific topics.

Towards the end of the summer, we met with some of the graduate students who will facilitate these workshops. They were helpful and offered good advice. The graduate students have experience leading tours and other programs. One student suggested coming up with an icebreaker activity, which would be a fun way to warm up the audience. As a group, we came up with a matching game for the survival and technology workshop. The audience will have to match which objects go together, for example, what objects people use for the same purpose or an “older” technology and its modern equivalent. An abacus would match a calculator and people use sewing needles and looms for textile production. In the graduate students’ experience, some groups are shy, and a simple game like this may encourage the audience to talk and participate.

---

<sup>41</sup>John H. Falk and Lynn D. Dierking, *Learning from Museums*, 49.

When my supervisors began to brainstorm these workshops, they knew that graduate students would facilitate the programs. According to my supervisors, guests at the museum enjoy graduate student led tours. Guests have informed staff that they enjoy hearing from the students, who are becoming professionals in their respective fields. People like knowing they are hearing from experts, but because they are still students, they are more relatable and less intimidating than professors. Graduate student gallery tours have almost doubled from the previous years, so the museum is looking to expand the opportunities it has for graduate interactions with the public.

The graduate students are highly qualified to lead these workshops because of the training the museum staff has provided them. We printed up all the workshops' information, so that the students can prepare to lead each program. Besides learning the material for each workshop, it is important to be a good public presenter as well. The staff train anyone interacting with the public, including the graduate students, volunteers, and docents. They learn how to interact with the guests, present the material so that it is interesting and understandable to a variety of audiences, and how to be engaging. One of the most important skills presenters can have is the ability to read a group, so that they may tailor the level of information they present, based on the knowledge of the present group. Some groups may have more prior knowledge about the topic than others may, and even within a group people have different personalities, interests, and abilities. A facilitator must judge what is an appropriate amount of engagement and information to offer. Some groups may be more interested in what the presenter has to say, while others may like to have more discussion. For example, the Learning Programs department has a Mummy Makers program that is usually for schoolchildren, but senior groups also book that program. For senior groups, a presenter may make more real-world connections or jokes,

which an adult group would understand. A good facilitator, which these graduate students have proven to be, can adapt a program according to the present audience.

I provided the graduate students with numerous questions to pose during these workshops. Asking questions is a way to foster thought and discussion, and to get the audience to participate. This is an important teaching technique, in which a facilitator posing questions forces the student to reason through a problem himself. There are many types of questions that a facilitator can ask: questions about personal experience, do you have any body modifications; questions about prior knowledge, do you know how long people have been tattooing their bodies; analytical questions, why do you think people modify their body; and evaluation questions, after hearing about the long history of body modification, why is there still a prejudice against some forms of modification. Questions in which a person simply recalls information are considered lower cognitive questions, but the analytic and evaluation questions are higher cognitive questions, and involve a mental rationalization of information to produce or support an answer.<sup>42</sup> Ideally, facilitators should ask a variety of questions. Questions are a way to foster discussion. Discussion in the educational process creates the chance for people to reflect and make meaning out of the experience they just had.<sup>43</sup> I hope that discussion will help reiterate the points we want people to take away from our workshops.

During the last week of my internship, we were able to have a trial run of the body modification workshop. I met with a graduate student to go over the content, explain how I thought the workshop could run, and go over the objects. It was not a complete test run though, the student only presented half of the workshop, because of a shortage of time. The audience

---

<sup>42</sup> Jessica Fries-Gaither, "Questioning Techniques: Research-Based Strategies for Teachers," *The Ohio State University*, October 2008, <http://beyondpenguins.ehe.osu.edu/issue/energy-and-the-polar-environment/questioning-techniques-research-based-strategies-for-teachers>.

<sup>43</sup> Alice Kolb and David Kolb, "Learning Styles and Learning Spaces," 208.

was comprised of staff, from the Academic Engagement and Learning Programs departments, and high school interns. It was helpful to have the staff there, especially those who have experience creating workshops and lesson plans. Educators from the departments provided useful feedback. As suspected, the audience greatly enjoyed the fact that they could touch the objects. The staff liked the Power Points; pictures are good to have in the background for the audience to look at.

The best way to test the effects of an educational program, and to know how well the audience received the program, is to get feedback. Questionnaires and interviews are the easiest methods to get feedback, but there are a couple of drawbacks. Immediately after a workshop, the facilitator can ask the audience their opinions. It would really help to know how people feel about the content, if it was interesting or not, if there was enough content or too much, and if people enjoyed the artifacts. Any feedback is valuable, and could lead to alterations that would improve the workshops. As useful as it would be to question the audience, the programs are fun and informal. Some people might not be comfortable sharing their opinions or answering questions, and we do not want them to feel pressured.

It would also be ideal to question or interview people after a period of time has passed, to see how well they retained information. It would be useful to know what parts of the workshop people remember, what content they learned and remembered, and if they chose to share their experience with other people. This would be a feasible task, if the audience were a school group or a group that the staff could contact in the future. However, due to the nature of the audience, getting feedback could be difficult. Some of these groups could be from out of town or unreachable, so it would not be possible to contact them at a later time.

I was excited to be a part of the team that created these new Object Based Learning workshops at the Penn Museum. I was happy to help the staff create more fun and educationally engaging programming for the public. Educators at the museum take great care to incorporate educational theories into the programming they create for university students or grade school students in the community. It was time to take that kind of care and effort to develop that level of programming for the general public. I am still in contact with my supervisors and look forward to hearing about the implementation of our new workshops. While I believe these workshops will run smoothly, I look forward to further discussion with my team and the graduate students about how to improve the workshops.

### Bibliography

- Bingmann, Melissa, Nancy Cutler, Tim Grove, Kimberly A. Huber, and Anna Johnson. *The Museum Educator's Manual Educators Share Successful Techniques*. Lanham: AltaMira Press, 2009.
- Chatterjee, Helen J and Leonie Hannan. *Engaging the Senses: Object-Based Learning in Higher Education*. New York: Routledge, 2016.
- Dean, David. *Museum Exhibition Theory and Practice*. New York: Routledge, 1994.
- Dierking, Lynn D, and John H. Falk. *Learning from Museums: Visitor Experiences and the Making of Meaning*. Lanham: AltaMira Press, 2000.
- Enkenberg, Jorma and Henriikka Vartiainen. "Learning from and with museum objects: design perspectives, environment, and emerging learning systems." *Educational Communications and Technology*. (2013): 841-862.
- Fries-Gaither, Jessica. "Questioning Techniques: Research-Based Strategies for Teachers." *The Ohio State University*. October 2008. <http://beyondpenguins.ehe.osu.edu/issue/energy-and-the-polar-environment/questioning-techniques-research-based-strategies-for-teachers>
- "Group Sales Strategic Plan FY17-F19." The University of Pennsylvania Museum of Archaeology and Anthropology, 2017. 1-17.
- Kolb, Alice, and David Kolb. "Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education." *Academy of Management Learning & Education* 4, no. 2 (2005): 193-212.
- Kreps, Christina. "University museums as laboratories for experiential learning and engaged practice." *Museum Anthropology* 38, no. 2 (2015): 96-111.
- Shams, Ladan and Aaron Seitz. "Benefits of multisensory learning". *Trends in Cognitive Sciences* 3, no. 1 (2008): 1-7.



Working with artifacts from the education collection.





African mask from the education collection.



Test run of workshop.



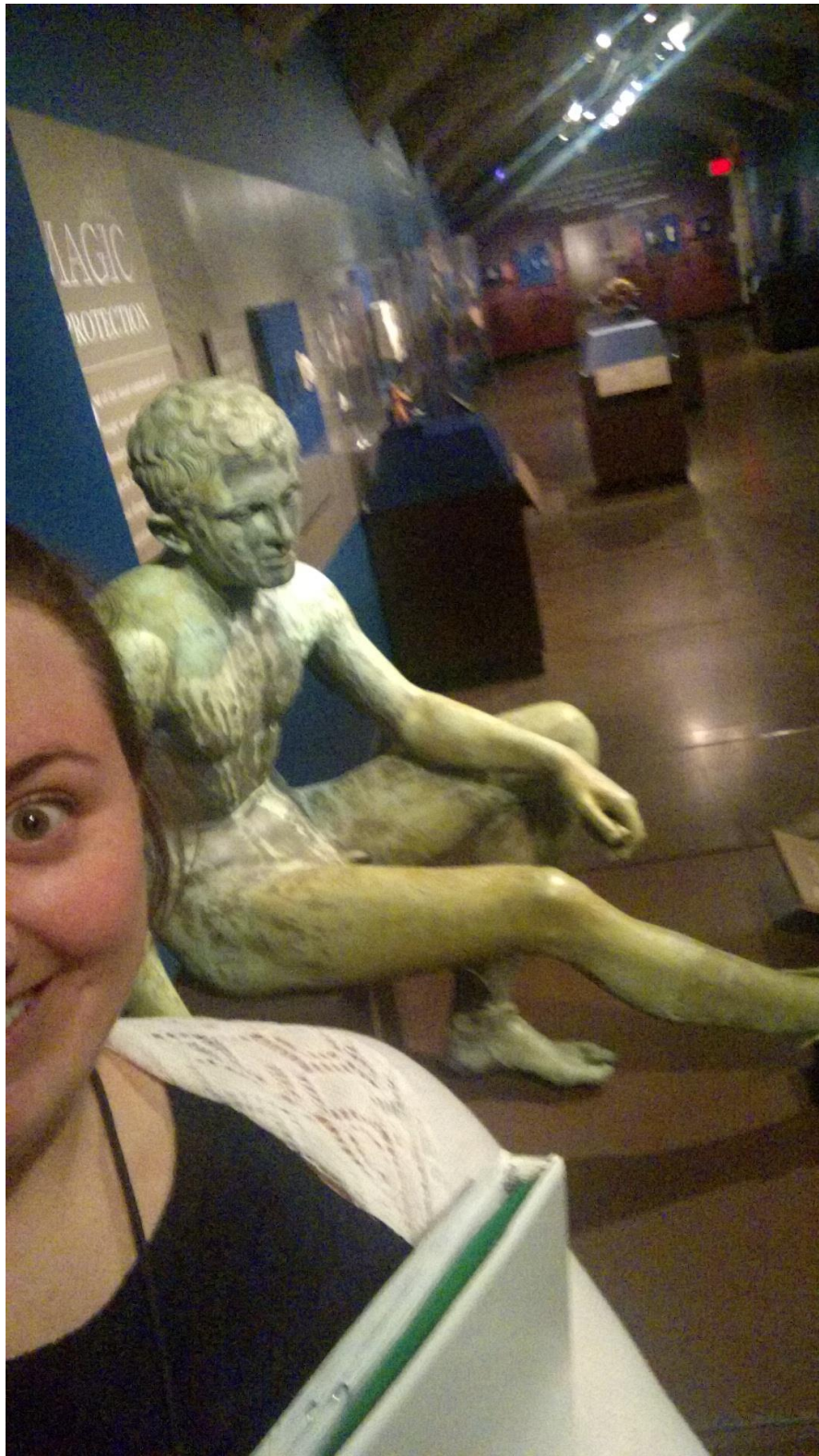
I worked the WAWA Welcomes America celebration selfie booth.





Outside the Rodin Museum.





The Magic Exhibit.



Herakles club and lion skin hat.